



Impact of Point-of-Sale Micro Businesses on Employment Generation in Jos North Local Government Area of Plateau State, Nigeria

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Abstract

This study examined the contribution of Point of Sale (POS) businesses as micro enterprises to employment generation in Jos North Local Government Area of Plateau State, Nigeria. The study was motivated by the increasing rate of unemployment in Nigeria and the growing participation of youths in POS businesses as a source of livelihood and self-employment. The research specifically investigated the extent to which POS businesses have contributed to job creation and income generation in the study area. The study adopted both descriptive and quantitative research approaches. Primary data were obtained through questionnaires and interviews administered to POS operators, while secondary data were sourced from publications of the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), SMEDAN, journals, textbooks, and other relevant materials. A total of 387 respondents were sampled, and the data were analyzed using descriptive statistics and the Generalized Linear Model (GLM). The findings revealed that POS businesses have significantly contributed to employment generation in Jos North. The study showed that many POS operators who initially operated alone later expanded their businesses and employed additional workers. The GLM results indicated that monthly wages paid to employees, location of POS outlets, and age of business operation had positive and significant effects on employment generation, while the proliferation of POS outlets without corresponding expansion reduced employment opportunities due to increased competition. The study also identified major challenges faced by POS operators, including inadequate finance, poor network services, failed transactions, fake alerts, insecurity, and difficulty in accessing loans. The study concluded that POS businesses play an important role in reducing unemployment and generating income in the study area. It therefore recommended that government should create favorable credit policies, improve technological

infrastructure, strengthen regulations against fraudulent transactions, and support POS operators through improved banking services and easier access to finance in order to enhance the employment generation capacity of micro enterprises in Nigeria.

JEL CLASSIFICATION: J33, E24, M13

I. INTRODUCTION

Micro Enterprises (MEs) are acknowledged as the drivers of socio-economic development all over the world because of the significant role they play in the growth of Gross Domestic Product (GDP), job creation, value addition, innovation and entrepreneurship. Micro Enterprises (MEs) play a major role in the development of most modern economies. They account for the majority of businesses worldwide and contribute significantly to job creation, poverty reduction and global economic development. Micro Small Medium Enterprises (MSMEs) are central in the effort of achieving environmental sustainability and more inclusive growth. However, these contributions differ and vary widely across firms, sectors and even countries. In every nation, SMEs are not just job creators but also catalysts for economic and social development. SMEs account for over half of GDP in the majority of OECD nations, and some international estimates have this number as high as 70%. Although its contribution varies by sector, it is especially substantial in the service sector, where SMEs in almost all OECD nations account for 60% or more of GDP (International Labour Organization, 2019). As globalization proceeds, developing and transition nations as well as their enterprises face major challenges of strengthening their capacity both institutional and human in order to take advantage of trade and investment opportunities.

In many nations, micro, small, and medium-sized businesses (MSMEs) are unquestionably essential to economic growth. They provide the majority of enterprises globally with employment, innovation, including entrepreneurial



skills. With ninety percent of enterprises outside the agricultural sector and over fifty per cent of jobs globally, MSMEs play a significant role in job creation and global economic development. According to the Organisation for Economic Cooperation and Development, many individuals in emerging economies work in MSMEs, which account for approximately 45% of total employment and 33% of GDP in these countries. MSMEs employ 40% of India's workforce, which is estimated to be over eighty million people. Approximately 1.3 million MSMEs account for 45% of India's manufacturing output, 40% of total exports, and roughly 17% of India's Gross Domestic (Jorge, 2021). Over the last three decades, the private sector has been able to reduce the proportion of the developing world's people living below the poverty line from 52 per cent to 22 per cent. MSMEs created four out of five new formal sector jobs in developing nations, accounting for approximately ninety percent of overall employment (Lessidrenska, 2019). They have been a major contributor to the Indonesian economy, accounting for 99.9% of employment and 60.5% of national GDP. On the other hand, it indicates that the number of entrepreneurs in Indonesia is just around 3.1%. This statistic demonstrates that Indonesia has a lower level of entrepreneurship than neighbouring countries, such as Singapore (8.76 percent), Malaysia (5 percent), and Thailand (4.26 percent). (Ahmad-Shohibboniawan, Ivan, & Aditya, 2024).

Empirical analysis shows that MSMEs contribute over 55% of GDP and over 65% of total employment in high income countries. MSMEs and informal enterprise account for over 60% of GDP and over 70% total employment in low income countries while they contribute over 95% of total employment and about 70% of GDP in middle income countries. They account for approximately 90%

of businesses, up to 40% of national income GDP, and more than 50% of global employment in emerging economies. According to estimates, approximately 600 million jobs will be required by 2030 to absorb the growing global workforce, making MSMEs development a top priority for many governments worldwide (Katau, 2014).

In 2009, the contributions of MSMEs to Gross Domestic Product (GDP) as reported by SMEDAN were about 37% making it the second contributor after the oil sector (SMEDAN, 2010). MSME has served as a source of income and employment to men and women in the country, thus improving the welfare and standard of living of

many Nigerians. MSMEs made up 49.7% of the country's GDP, 87.9% of all enterprises, 6.21% of total exports and 96.7 percent of all employment as of December, 2020 (SMEDAN, 2021). In 2001, SMEDAN reported the contribution of MSMEs to Nigeria's Gross Domestic Product (GDP) at about 37% making it the second largest contributor after the oil sector (SMEDAN, 2010). In Nigeria, MSMEs provided over 90% of employment opportunities in the manufacturing sector and accounted for about 70% of aggregate employment created per annum (Onwumere, 2000). Thus, the sub sector's potential for contributing to the country's growth and development cannot be neglected. Nigeria consists of large informal sector, where people engaged in buying and selling without adequately registering their businesses. The number of informal micro enterprises in 2017 in Plateau state was 815,430 and 704,725, the number of formal micro enterprises comprising of nano and micro enterprises as at December 2020 were 2,912 and 7,764 respectively. Micro enterprises in Plateau state generate a total employment of 191,606, in terms of gender employment; micro enterprises generate 107,759 and 83,848 for male and female respectively (SMEDAN & NBS, 2021).

As Nigeria battles with the issue of high rate of unemployment, many Nigerian especially the youths are exploring opportunities and taking into Point of Sale (POS) banking services as trade. With the advancement of financial technology (fintech), Nigerian are taking to the POS services subsector of the financial sector, known as agency banking, to become self-employed while creating jobs for others. The key force in generating fundamental approach in new business models are innovations in technology, which significantly influence the operation of organisations and drive competition in the modern economy (Usman et al., 2024). The use of POS terminal for making payments was introduced in Nigeria by the apex bank, the Central Bank of Nigeria (CBN) in 2012 to promote its cashless the policy with the aim of improving the payment system. With its introduction, many Nigerians who were desperately seeking for an employment and daily source of revenue, grabbed the opportunity which has led to increase in the number of active POS transactions (Okoye, Orajaka, & Nnebe, 2022). In 2012, the Central Bank of Nigeria introduced its cashless policy in order to develop an efficient, convenient and effective payment system for sustainable development; one of such is the POS. A report from CBN (2011) stated that the e-payment has helped to solve many financial challenges which include exuberant cost of



frequent printing of currency notes and currency sorting. Analysts have predicted the transition of transaction from physical cash to an electronic cash transaction medium called cashless policy (David, 2012). The basic instrument of achieving this is the 'Point of Sale' terminal. POS are found in stores, hospitals, beer parlors, restaurants, fueling stations, schools, churches, streets and other service centers.

Unemployment has been identified as one of the fundamental developmental challenges facing Nigeria presently. The level of unemployment in Nigeria has grown large affecting the youth and socio-economic development of the country. The unemployment level in Nigeria has led to increase in crimes, political unrest and other social vices, since the country's economy cannot absorb an optimal number of the country's labor force (Ipaya, 1998; Ezie, 2012). The unemployment rate for Q1 2024 was 5.3%, showing an increase from 5.0% recorded in Q3 2023. The unemployment rate among males was 4.3% and 6.2% among females. By place of residence, the unemployment rate was 6.0% in urban areas and 4.3% in rural areas for Q1 2024. Looking at the youth, the youth unemployment rate was 8.4% in Q1 2024, showing a decrease from 8.6% in Q3 2023. In Q1 2024, the share of underemployed Nigerians was 10.9%, a decline of 1.4 percentage points from the 12.3% recorded in Q3 2023. (NBS,2024/25; Nigeria Labour Force survey report Q1, 2024).

The unemployment rate in Plateau State was about 11.8% in 2002 and dropped to 0.4 in 2003 however since then it has been on the increase and has reached a height of 26.15 percent in 2020 (Sasu,2022: NBS, 2020 Labour force statistics: unemployment and underemployment report q4 2020). However, in 2023, the unemployment rate in the state dropped to 7.4 percent (NBS, 2024 Nigeria Labour force survey, 2023).

Micro enterprises have played critical roles in the development of emerging economies such as India, Philippines, Japan and Indonesia through the provision of employment and the reduction of poverty. However, in Nigeria there is little evidence of the contribution of Micro enterprises to employment generation. It is against this background that this study seeks to investigate the contributions of POS business as a micro enterprise to employment generation in Nigeria, with focus on Jos North Local Government Area of Plateau State. The objective of this study is to assess the contribution of POS in generating employment in Jos North LGA of Plateau state.

II. LITERATURE REVIEW

2.1.1 The Concept of Micro Enterprises (MEs)

There is no universally accepted definition of MSMEs, every nation tends to drive its significance from the part it is supposed to play in the economy as well as its level of development. Inflation (changes in the level of prices), institutional goals that are unique to each organisation, and technological advancements all affect how the definition evolves through time. Fixed assets (capital investments), yearly turnover, gross output, and number of employees inside the company are the factors utilised to define MSMEs (Ajose, 2010). In developing countries, it is often very difficult to count and measure individually the number of micro, small and medium scale enterprises.

The Small and Medium Enterprises Development agency (SMEDAN) and National Bureau of Statistics (NBS) survey (2021) has broken down the micro enterprise into two; these are Nano and Micro enterprises. A Nano or homestead enterprise is an enterprise that employs 1-2 persons and has a turnover of less than ₦3 million. While a micro enterprise is an enterprise that employs 3-9 persons and has a turnover of ₦3 million and less than 25 million naira.

SMEDAN defines MSMEs based on dual-criteria class limits, that is, employment-based and assets-based criteria (excluding land and buildings). Under these criteria, a classification conflict may occur, according to SMEDAN. In such circumstances, asset-based criteria are superseded by classifications based on employment. In other words, if an organization only employs six people but has assets of seven million naira (N7 million), it will be considered a micro-organization. Due to the relative stability of MSMEs' employment levels compared to asset-based criteria, which may frequently be compromised due to Nigeria's inflationary trends, the SMEDAN classification accorded more weight to the employment status of MSMEs (SMEDAN/NBS, 2021)

The definition of micro enterprise given by SMEDAN and NBS report 2021 will be adopted in this study because it takes into consideration to the inflationary trends in Nigeria that continues to make the value of the naira change. Since the asset-based criteria can be frequently compromised by the inflationary trends in Nigeria, hence the employment based definition tends to be more stable given the inflationary trends in Nigeria. Micro enterprise as a business that employs less than ten people and has an asset base of less than/or five million naira excluding land and building.



2.1.2 Concept of Employment

The International Labour Organisation (ILO) defined employment as all people of working age who engage in any type of economic activity for pay or profit for a short period of time (International Labour Organisation, 2013). These include self-employed and wage-earning individuals who worked for at least one hour in a job or employed individuals who are not working due to a temporary absence from a job or working-time arrangements such as shift work and compensatory leave for overtime and those who perform some work for profit or family gain in kind or cash or those who work with a firm, a business or service.

Employment refers to all people of working age, who during a short period, engages in any kind of economic activity to produce goods or provide services for pay (wage/salary) or profit. These include self and wage employed people who worked in a job for profit or income as well as those who worked in a family business. The micro enterprise in Nigeria comprises of mostly the informal sector offering self-employment for its owner while in some rare cases the owner employs few people.

2.1.3 Concept of Entrepreneurship

The French root "entreprendre," which means "to undertake," is where the term "entrepreneur" comes from. The process of producing something unique and valuable by investing the required time and energy, taking on the associated financial, psychological, and social risks, and reaping the rewards of both financial and personal fulfilment is what Hisrich (1989) defined as being an entrepreneur. McClelland (1961) opined that the traits of achievement is the driving force for successful entrepreneurs. A successful entrepreneur needs to possess technical proficiency, initiative, sound judgement, intelligence, leadership abilities, self-assurance, vitality, personality, inventiveness, equity, honesty, tact, and emotional stability. (Collins & Edwin Kimitei 2016)

In 1985, Peter Drucker defines an entrepreneur as someone who "always looks for change, responds to it, and capitalises on it as an opportunity." Entrepreneurship can be described as an economic function, a type of behaviour, a collection of qualities, a small firm, or the establishment of a new enterprise. In terms of innovation, entrepreneurship was thought to drive innovation and change rather than respond to them, resulting in economic development. Entrepreneurship is a risk-taking factor that

determines the outcome in terms of profit or loss. (Olayiwola, Kazeem & Femi2019).

Globalisation has an enormous impact on the entrepreneurial market, altering the dynamics of new business endeavours around the world. Globalisation has an impact on entrepreneurship through varied economic, cultural, and business settings, both within and between countries (Markova & Akaiso, 2023). This impact is multidimensional, including how entrepreneurs handle cross-cultural concerns, global entrepreneurial innovation, and the broader business environment. Entrepreneurship is defined as the capacity and willingness to create, organise, and manage a business operation, including all of its uncertainties, in order to profit. The most visible form of entrepreneurship is the establishment of new firms. In economics, entrepreneurship including land, labour, natural resources, and capital can be profitable. The entrepreneurial vision is defined by innovation and risk-taking, and it is an essential component of a country's ability to flourish in a constantly changing and increasingly competitive global marketplace. Entrepreneurs usually encounter considerable obstacles before their firms get off the ground. These include obtaining finance, managing governmental procedures, and creating a sustainable business concept. The failure to overcome these initial challenges might prevent many great concepts from ever becoming successful enterprises (Looze & Desai, 2020).

2.1.4 Concept of Point of Sale (POS)

Okoye, Orajako and Nneba, (2022) conceptualised Point of Sale (POS), as a point of purchase, as a system that enables owners of local debit cards (ATM cards) to withdraw cash, deposit funds, and pay for goods and services, including utility bills like power, airtime, cable, or decoder subscriptions. Payment is frequently made using the POS terminal (device). The point of sale provides financial services to consumers even in unbanked communities while the merchant earned profit called commission.

Adeoti (2012) described a POS machine as a terminal or a device that enables a business to receive payments from clients using cards. It functions very similarly to an ATM, but POS terminal only accept payments on behalf of the merchant, which is often the registered firm that has an account with a bank. Hence, POS can be used in stores, restaurants, fueling station, shops, salons, hospitals etc. to facilitate the payment of goods purchased or services rendered.



Point of sale terminal is a device that enables a merchant to offer convenient and accessible financial services to people (debit card holders) such as withdrawals, accepting deposit, bill payments, payments for goods purchased and services rendered while earning profit called commission and income. It offers accessible and close door financial services to people including those living in the rural areas and unbanked communities of Nigeria.

Classical Theory of Income and Full Employment:

Classical economists like Adam Smith, Ricardo, Say, Mill, and Senior in the 19th century believe in *laissez faire* policy that is, there is no government intervention in any economic activities and that the economy would always be in full employment equilibrium. (Sujan, (2021)The classical economic theory of employment believed that wealth is created by production not by consumption. According to the classical analysis, the economy's labour, goods, and money markets determine production and employment since the forces of supply and demand in these markets will ultimately result in full employment. According to the classical analysis, the aggregate production function, demand for labour, and supply of labour all affect the economy's output and employment. There is a precise relationship between total output and employment (number of workers), given the stock of capital, technical expertise, and other parameters. According to classical economists, involuntary unemployment is impossible in a capitalist economy. All those who were willing to work will find employment at the going market rate (Shraddha, 2018).

Keynes (1936) was the main critique of the classical assumption of a self regulating economy. The great depression of 1930s led Keynes to have proved that market forces cannot attain equilibrium themselves; they need an external support for achieving it that is the government. At the equilibrium level, it is not necessary that full employment may be attained. Aggregate demand may be equal to aggregate supply at less than full employment level.

In Nigeria where micro enterprises operate freely while the government provides support and policies that encourages micro enterprises with the aim of reducing unemployment through employment generation, income generation, improved standard of living and the reduction in income inequality.

Theory of Entrepreneurship

Papanek (1062) and Harris (1971) were the two main proponents of the economic theory of entrepreneurship, both of whom worked in the 1960s. According to the proponents of this idea, businesses may innovate, be creative, and usher in a new order by using resources, labour, materials, and other assets when the economy is good (Oshinowo, Adeoye, Ishola, & Kamaldeen, 2017). They contend that financial benefits are the main driver of entrepreneurship. The inner motivation of people has repeatedly been connected to financial success. Therefore, it is believed that these advantages and incentives are establishing the necessary framework for the emergence and development of industrial entrepreneurship.

Peter Drucker and Howard Stevenson propounded the opportunity-based theory. A comprehensive conceptual framework for entrepreneurship research is provided by an opportunity-based approach (Fiet, 2002; Shane, 2000). Contrary to what the Schumpeterian or Austrian school holds, entrepreneurs do not initiate change; rather, they seize the opportunities that changes in technology, customer tastes, etc. creates. The entrepreneur constantly seeks change, reacts to it, and seizes opportunity from it." According to Drucker's opportunity construct, business people tend to be more interested in the opportunities presented by change than the issues. Drucker's opportunity-based framework is expanded by Stevenson (1990) to add resourcefulness. This is based on analysis of the distinctions between entrepreneurial and administrative management. The pursuit of opportunity "without regard to resources currently controlled" is, according to Kwabena (2011), the core of entrepreneurial management.

III. EMPIRICAL REVIEW

Mafimisebi, Akinbobola, Mafimisebi, Ugbedeajo, & Olarinde (2019) revealed from their study on the effect of point of sales (POS) utilization on effective demand for agricultural commodities in stores and supermarket in Akure Metropolis, Ondo State, Nigeria using multistage sampling procedure to select one hundred and sixty consumer who paid for agro-commodities through POS that convenience is the primary reason for using POS. The study concluded that the use of POS has increase the demand for agricultural commodities.

Emenike, Okeke, & Chukwuma (2022) investigated the determinants of POS adoption in Nigeria and the impact of POS business on youth entrepreneurship development in Nigeria, with a focus on POS agents in the Southeast. They



used Pearson Product Moment correlation and the analysis revealed that POS business has a significant impact on the financial performance and business skills of young entrepreneurs in Nigeria. It was therefore, suggested that financial institutions, the CBN, POS agencies, and the Nigerian government may consider the factors influencing POS adoption in Nigeria, particularly among youths.

Afolabi (2013) examined the impact of SMEs financing on economic growth in Nigeria between 1980 and 2010. The study employs the Ordinary least squares (OLS) method to estimate multiple regression models. The study found that SMEs' output, as measured by wholesale and retail trade output as a component of GDP and commercial banks' credit to SMEs have a positive and significant impact on economic development.

Etale and Light (2021) using descriptive statistics and multiple regression analysis of OLS examined the impact of small and medium enterprise development on Nigerian growth. Their findings from the secondary data used revealed that the aggregate asset base and aggregate capitalization of SMEs have little or no significant effect on GDP. It was discovered that there is a long run relationship between the variables. The Federal and/or state Ministries of industry in collaboration with SMEDAN should device strategies for reporting the operations of SMEs in Nigeria, and putting policies in place to resuscitate the sector was their recommendation.

Olayiwola, (2019) investigated the impact of entrepreneurship development on the growth of Micro, Small, and Medium Enterprises (MSMEs) in Nigeria, focusing on Befy Links Nigeria Limited, a Lagos-based MSME in the Information and Communications Technology industry. The analyses in the study were conducted using descriptive and Chi-square approaches. It was discovered that entrepreneurship development has a substantial impact on the growth of MSMEs, and that training and re-training of existing and intending entrepreneurs are required to ensure sufficient impact of entrepreneurship development on the growth of MSMEs in Nigeria.

Nwude, Udeh & Nwude (2022) explored the impact of electronic banking as a tool for financial inclusion in Nigeria as cashless policies in the Nigerian financial system. The specific objective of their study was to determine the extent to which transactions using mobile telephone, point of sale and automated teller machine (ATM), and internet banking had impacted the banking adult in Nigeria. The study revealed that mobile/telephone banking and ATM transactions shared a positive but non-

significant relationship with the banking adult in Nigeria, while transactions through POS and internet channels shared a negative and non significant relationship. As a result, the study recommended that the CBN should educate people adequately on the importance of e-banking through an intensive campaign, as this would promote trade and commerce through electronic channels and facilitate the success of the CBN's financial inclusion policy.

Hassan & Ahmad (2016) investigated the role of micro enterprises in Timergara city using descriptive statistics and regression analysis. According to the study, there is a positive growth in micro enterprises in Timergara city. In terms of job creation, these micro enterprises employed on average 4.75 people per micro enterprise. They concluded that micro enterprises play important in reducing unemployment as well as generating income for its owners and employees. They recommended that access to credit, price control, government oversight and energy provision are all critical for the development of these micro enterprises.

Elijah & Usaini, (2021) conducted an empirical investigation on the role of small businesses in economic growth and poverty alleviation in North-Western Nigeria using time series data of Kano state, Nigeria using the ARDL approach. The study discovered that SME, poverty and economic growth played important roles in influencing Kano state's economic growth (GDP). The turnover of SME returns and SME employment were both negative and significant, where as the turnover of SME loans were both significant and positive. The study concluded that the results of ARDL estimates were reliable and valid. It further recommended that government should prioritize the promotion of SMEs because they help to alleviate poverty.

Kadiri (2012) investigated the contributions of small and medium scale enterprises (SMEs) to job creation in Nigeria. The study provided a sectoral analysis of SMEs' efficacy as a vibrant tool for job creation in the country. Binomial logistic regression analysis was used as a statistical tool of analysis. It was discovered that almost all of the SMEs sampled relied on informal sources of finance to get started. As a result, the study suggested that informal financial institution's activities be integrated.

Sanusi and Hamza (2019) investigated the impact of SMEs on economic development. Their study was conducted on Asian countries which covered the period of 2008–2015. This study had a



total population of 49 countries and a sample size of 17 with a total of 136 observations using convenience sampling. Furthermore, the independent variable was the SME's growth and the dependent variables were the gross domestic product (GDP), foreign direct investment (FDI) unemployment and exports. The findings of the study using descriptive statistics, the Pearson correlation coefficient, and multiple regression analysis revealed that while SMEs have a positive and significant impact on unemployment and export, they have a negative and significant impact on GDP and foreign direct investment.

IV. METHOD OF DATA ANALYSIS

The data used for this study was sourced through primary and secondary sources of information. The Primary data will be obtained through the use of questionnaires and personal interviews which will be administered to POS business owners in Jos North LGA of Plateau state. This study is conducted in Jos North Local Government Area of Plateau State in Nigeria. The local government is a city located on the Jos Plateau known as "the home of peace and tourism" on the altitude of about 1238m (4062 ft.) above sea level and a temperate climate. Its headquarters is in the city center of Jos.

Jos North Local Government area has industries like standard biscuits, Naraguta shoe industry, financial institutions, terminus Market, Farin Gada market, stadium etc. It also has educational institutions such as the National Institute of Mining and Geosciences, University of Jos, College of Accountancy, federal College of Forestry, Institute of Archeology and Museum Studies, The National Film Institute, Polo Club among others. It is the trading hub of the state as commercial activities are steadily rising. This makes the study area a good choice as the presence of these institutions, enterprises and markets have the potentials of addressing the subject matter "employment generation" focusing on the contribution of Micro Enterprises to employment

generation, with specific interest on Point of Sale (POS) businesses as raised in this study.

The secondary data were sourced from Central Bank publications, the National Bureau of Statistics publications, SMEDAN publications, Federal and State government agencies publication on Micro enterprises, publication from non-governmental organizations, textbooks, Journals, magazines, seminar papers, internet materials and other relevant materials.

The techniques of analysis adopted for this study are both descriptive (qualitative) and quantitative methods of analysis which portray Micro enterprises (Point of Sale businesses) role in employment generation in the study area. The descriptive method will be employed to analyse the data generated from the field survey. To achieve the objective of the study, the study adopted the use of Generalized Linear Models (GLMs) in order to determine the contribution of micro enterprises to employment generation in the area under study. Nelder and Wedderburn created generalized linear models as a way to combine several statistical models like linear regression, logistic regression, and Poisson regression. A generalized linear model (GLM) in statistics is an adaptable generalization of conventional linear regression. It has a wide range of additional models, enabling the response variable to have an error distribution other than a normal distribution. The GLM generalizes linear regression allows the linear model to be paired to the response variable (dependent variable) via a link function and the size of each measurement's variance to be a function of its predicted value (Nelder & Wedderburn, 1972). Even when the underlying link is non-linear, GLM models allow us to develop a linear relationship between the response and predictors. This is accomplished by employing a link function, which connects the response variable to a linear model. Unlike Linear Regression models, the response variable's error distribution does not have to be normally distributed. The response variable errors are expected to follow an exponential family of distributions, which can be normal, binomial, Poisson, or gamma distributions.

5.3 DISCUSSION OF FINDINGS

Table 1: Micro Enterprises and Employment Generation in Jos North

Number of Employees	At Inception		At Present	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Owner(Self-employed)	209	54.0	150	38.8
1	88	22.7	108	27.9
2	58	15.0	80	20.6
3	18	4.7	20	5.2
Above 3	14	3.6	29	7.5



Total	387	100	387	100
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Source: Field Survey, 2026

The descriptive analysis in the table above depicted the number of employees both at inception and at present. At inception, 54.0% of the respondents were owners of the POS outlet who were self employed, managing and running the business by themselves, hence they do not have any employee apart from themselves. This implies that the business was run by the entrepreneur, 22.7% had only one employee, and 15.0% had 2, 4.7% had 3 while 3.6% had more than 3 employees. At the time

of this survey, 38.8% of respondents revealed that they were self employed, managing and running the business on their own hence they had no employee, 27.9% had only 1, 20.6% had 2, 5.2% had 3 and 7.5% had more than 3 employees. Comparatively, the number of entrepreneurs who were self employed had decreased significantly by 15.2%. This signifies an expansion in the business which had led to the employment of more workers to run the business.

Table 2: Employees Monthly Salaries (₦)

Employees monthly salary(₦)	Frequency	Percentage
<₦5000	82	21.2
₦5001 - ₦10000	114	29.5
₦10001- ₦20000	153	39.5
₦20001 and above	38	9.8
Total	387	100

Source: Field Survey, 2026

Table 2 showed employees salaries, 21.2% entrepreneurs paid their workers less than ₦5000, 29.5% paid ₦5001 - ₦10000, 39.5% paid ₦10001-₦20000, 9.8% paid above ₦20000. This implies that POS business has provided a source of income and livelihood to many employees (people) within the study area.

**Table 9:
Challenges faced by POS operators**

Challenges	Frequency	Percentage
Insufficient funds/ inadequate finance	94	24.29
Inconsistent Government policies	44	11.37
Failed transaction/ fake alerts	45	11.62
Bad network	44	11.37
Insecurity/ theft	20	5.17
Scammers and fraudulent activities	30	7.75
Location of the POS outlets	30	7.75
Inability to access loan facility	80	20.67
Total	387	100

Source: Field Survey 2026

Finance is one of the most important requirements in a business. It was reported to be the main challenge faced by POS business. From table 9, about 24.29% of the respondents had difficulty in getting finances to run their business adequately. This to a large extent limits their capacity to expand their business and create jobs. About 11.37% POS entrepreneurs revealed that inconsistent government policies have affected their businesses negatively. What are the challenges that you faced as a POS business owner?

The major challenge that I faced in this POS business is inadequate finance to expand the

business. Inadequate/lack of cash as a result of the currency redesign in January and February 2023 is another problem that we have in this business, and our business needs a lot of cash. This change in government policies has affected our business negatively. Another problem we have is our inability to access loan from banks to expand our business. (Gloria)

We encounter a lot of challenges in this business. The main challenge of this POS business is the issue of finance. I do not have enough money to expand my business. We usually encountered failed transaction and fake alert, where an incomplete



transaction that has shown successful can be reversed much later when the customer has been paid and has already left. This makes me to lose a lot of money. Bad network due to system and network failure is another problem we faced in this business. Scammers and fraudsters have defrauded us of our hard earned money. (Kumben)

Some of the policies revealed by the respondents are the currency redesign policy which was implemented in February, 2023 and the policy was later reversed. Also, the reduction in the withdrawal limit set by the apex bank has reduced the withdrawal capacity of customers and POS entrepreneurs' find it difficult to access cash. This policy has limited the entrepreneurs' capacity to dispense cash and meet customers demand. 11.62% complained that they have lost a lot of their finance as a result of failed transaction and fake alerts while 11.37% complained of bad network. 7.75% respondents were reported to have challenges of scammers and fraudulent activities through fake alerts. They complained that due to bad network a completed transaction could be reversed to a clients account without the knowledge of the owner. By the time the entrepreneur discovered it, the client must have left. On the issue of insecurity and theft, 5.17% respondents revealed that insecurity cause by as ethno-religious crisis in the local government had led to huge loss of money for their business. Some respondents revealed that theft is one of the major challenges they faced especially towards evening and night. While those POS entrepreneurs whose outlets are in beer parlors, joints and relaxation spots disclosed that customers usually run with their

money. 20.67% entrepreneurs revealed that they were unable to access loan in order to expand their business. This will reduce their income generating capacity as well as the expansion of the business. The reason for their inability to access loan especially from commercial bank is because they do not have collateral demanded by the banks. Another reason for their inability to access loan was because of the high interest rate charged on the loans.

The GLM specification of the non-linear relationship between POS and employment is expressed in equation 1 below;

$$EMP_i = \exp(\beta_0 + \beta_1 WAG_i + \beta_2 NOP_i + \beta_3 LOB_i + \beta_4 AOB_i) + \varepsilon_i \text{---(1)}$$

Where:

EMP = Number of employees at present (NEP)

WAG = Monthly wage paid to employees

NOP = Number of POS outlet

LOB = Location of POS outlet

AOB = Age of the Business

Exp = exponential

β_0 is the intercept, $\beta_i = 1, 2, \dots, 4$ are the parameters/coefficients to be estimated and ε is the error term.

A priori Expectation

The *a priori* expectation for the employment model is; $\beta_1, \beta_2, \beta_3$, and $\beta_4 > 0$, That is, all the explanatory variables are expected to have positive effect on employment in the study area.

Decision Rule: The decision rule is to reject the null hypotheses if the probability value of the Wald Chi-square is less than 0.05 (5%) level of significance.

Result of GLM Showing the Contribution of Point of Sale (POS) Business to Employment in Jos North.

Variables	Coefficients	Sdt, Error	z-statistics	Prob.
C	1.099249	0.053548	20.52843	0.0000
WAG	0.562625	0.039806	14.13425	0.0000
NOP	-0.771355	0.041689	-18.50246	0.0000
LOB	0.309607	0.063392	4.884015	0.0000
AOB	0.625113	0.057426	10.88556	0.0000
Chi-square	44.93180			
Deviance Statistics	0.117931			
Prob.(Chi square)	0.000000			

Source: Author's computation using E-views 10

The result from the GLM used to determine the contribution of POS business as a micro enterprise to employment generation revealed that monthly wages of POS employees (WAG), location of POS outlet (LOB), and age of business operation (AOB) had positive and significant relationship with employment generation in the area under study. This

implied that the years of experience gained by a POS entrepreneur will lead to increase in the business knowledge and experience of the owner. This can be translated into the expansion of the business and the employment of many people to run the business which will in turn increase employment in Jos North. The positive and significance of the



location of the business (*LOB*) implied that if a POS outlet is located in an area without or with few financial institutions such as banks and ATM machines, the higher the level of patronage from customers because of convenience to people and such will also enhance the expansion of the business. Also, POS outlets that are located in commercial and business area record higher returns than those located in less commercial areas.

The descriptive analysis from the field survey revealed that Jos North-west recorded high numbers of POS outlets than Jos North-north because there are very few ATM machines and Banks in that area. The result revealed that the Number of POS outlet at present (*NOP*) negates the *apriori* expectation. It implies that a 1% increase in the number of POS outlet, will lead to decrease in employment. This shows that an increase in the number of POS outlets without expansion or increase in investment will reduce employment generation. Also, the proliferation of POS outlets will lead to stiff competition in the business which may cause rivalry and eventual death of many outlets if not properly managed. The monthly wages of employees (*WAG*) has a positive and significant impact on employment conforms to the economic theory of entrepreneurship. The economic theory of entrepreneurship postulates that economic incentives and financial benefits are the main drivers of entrepreneurship; hence financial benefits are the inner motivator of people.

From the descriptive analysis, it was revealed that at the time of this survey, POS business had offered self-employment to about 38.8% of respondents and 61.2% people were able to secure employment through POS business in the study area. This signifies an expansion in the business which had led to the employment of more workers to run the business. The implication of this is that POS business is a vital economic activity for employment generation in the study area. POS businesses in Jos North are faced with numerous challenges such as inadequate/insufficient finance, bad network, failed transaction, lack of access to loan, lack of financial aid etc. But they were able to adjust their resources and have remained in business. This is in line with the Dynamic Capability theory which postulates that businesses are able to adjust their resources in order to remain competitive in the business. It also enabled the integration of internal and external resources to be achieved (Salvato & Vassolo, 2018).

The model as a whole revealed that jointly, the explanatory variables had a significant impact on employment generation by micro enterprises hence

the null hypothesis is rejected. The findings is in line with that of Ajuwon, Ikhide and, Akotey (2017), Ogunjimi (2021), Elimam (2017), Joshua (2021), and Oyelana and, Adu (2015) who found out that MSMEs had significant impact on employment in Nigeria.

V. CONCLUSION

The research conducted was aimed at determining the contribution of micro enterprise to employment generation in Nigeria analysing the Point of Sale (POS) in Jos North, Plateau state. In determining employment, the study was anchored on the economic theory of entrepreneurship in order to ascertain the contribution of Point of Sale to employment generation in the study area. The results indicated that Point of Sale businesses have an impact on employment and income generation by conforming to economic theory of entrepreneurship. Also, the results confirmed to the underpinning of the dynamic capability theory of MSMEs which opined that entrepreneurs are able to adjust their resources in order to remain competitive in the business environment as well as the integration of both internal and external resources to generate income. From the findings of this study, POS entrepreneurs in Jos North faced so many challenges which had limited their activities, but they were able to adjust their resources and have remained competitive in business. Therefore, the study concludes that, Point of Sale businesses have contributed to employment and income generation in the area under study.

VI. RECOMMENDATIONS

The following recommendations are made based on the findings of the study:

- 1 In order to enhance job creation and employment, the government should create relaxed-credit policies that support the development of micro enterprises by simplifying loans conditions and easing the bureaucratic processes involved in loan application and processing in order to enable MSMEs entrepreneurs to access loan easily. The loan from commercial and micro finance banks should be given to entrepreneurs especially those involved in micro businesses at a single digit interest rate and without collateral in order to make the servicing of the loan less burdensome.
- 2 The government should create an enabling environment through technological development in order to solve the problem of constant bad network leading to failed transactions. The government through the Central Bank should increase cash daily and weekly withdrawal limit for POS owners. This



will go a long way in helping POS businesses in meeting the cash need of their clients in the study area, thereby generating income and expanding their business.

3 To curb fraudulent activities and fake alerts for both POS owners and Users, the government should ensure that CBN tighten its regulations, rules and penalties on POS operations in Nigeria and monitor compliance to guidelines by merchants

4 Banks should ensure prompt reversal of failed transactions, while customer service units should be improved to resolve transaction issues quickly and avoid long delay that affect both POS owners and customers. This will boost the confidence of customers in the system and hence the expansion of the business which will in turn leads to more employment.

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